

Work Order ID 147749

June 10, 2016 2:42:14 PM

U/R

147749

Ball Only

Page 1

Item ID: D3594-044

Accept

N900040100

Setup Start ***NS1***

Revision ID: URF 16-531

Item Name: Floor Doubler Assembly, RH

Stop ***NS2***

Start Date: 6/10/2016 Start Qty: 5.00

5

Cust Item ID:

Required Date: 6/15/2016 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: SH Date: 6/10/16 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3594	Rev B U/R <i>OK</i> <u>6/16/13</u>								
100	FLOW WATER JET	0.02							
100									
Waterjet	Memo	0.06							
FLOW CNC Waterjet	1-Cut as per Dwg D3594 Dwg Rev: <u>B</u> Prog Rev: <u>B</u> 2-Deburr if necessary								
	<i>PTO</i> 								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.01							
Quality Control									
120	QC8- Inspect parts - second check	0.00							
120									
QC	Memo	0.02							
Quality Control									

DAS
38
9-89
JUN 14 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☒

Work Order: <u>147749</u> Part No. <u>D3594-044</u> NCR No. _____		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☒</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☒	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☒																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : <u>16/6/13</u>		Step #: <u>100</u>		QTY Effective : _____		MRB (QSI042) Approval DAS 12 9-89 <u>16/6/13</u>																			
Description Work Order Deviation				Disposition																					
Cut with modified dims per attached mark-up.				Acceptable.																					
				Completed By																					
				Lead hand / Supervisor Approval Verification																					
				QC / QA Coordinator Approval																					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____		MRB (QS1042) Approval 	
Description Work Order Deviation				Disposition			
				Completed By _____			
				Lead hand / Supervisor Approval Verification _____			
				QC / QA Coordinator Approval _____			
Root Cause		FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____	

Work Order ID 147749

147749

Page 4

June 10, 2016 2:42:14 PM

Item ID: D3594-044 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: URF 16-531 Stop ***NS2***
 Item Name: Floor Doubler Assembly, RH
 Start Date: 6/10/2016 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 6/15/2016 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: <i>Pat Duval's office</i>	0.00							DAS
190									9
Packaging	Memo	0.01							9-89
Packaging									
200	QC21- Final Inspection - Work Order Release	0.00							
200									
QC	Memo	0.08							
Quality Control									

D 160620

MLJ

JUN 21 2016

Stk 6/20/16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

Picklist Print

June 10, 2016 2:42:19 PM

Page 1

Work Order ID: 147749

147749

Parent Item: D3594-044

D3594-044

Parent Item Name: Floor Doubler Assembly, RH

Start Date: 6/10/2016

Required Date: 6/15/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev :A New Issue 07-01-22 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MS20426AD4-4

Purchased

No

100

Each

4,415.000

2

10

MS20426AD4-4

Rivet

**

16/06/20

DAS
36
9-89

Location

Loc Qty

Loc Code

GA

1962

125445

1962

ST312

2453

m132536

2453

10

M6061T6S.080

Purchased

No

170

sf

302.6000

0.51

2.684211

M6061T6S 080

6061-T6 .080 Sheet

**

16/06/20

Location

Loc Qty

Loc Code

MAT020

302.6

134217

26.4

m132772

4.3

m133587

7.7

m133828

16.3

m134551

17.9

m134696

144

m134830

86

4.3

MS21069-5

Purchased

No

170

Each

74.0000

1

5

MS21069-5

Anchor nuts

**

16/06/20

DAS
36
9-89

Location

Loc Qty

Loc Code

ST299

74

m131920

74

5

Under Review Notification

147749
~~SA~~ 6/10/16

Raised By: M. BELLAVANCE

Product #: D412-698-023

Date: 16.02.25

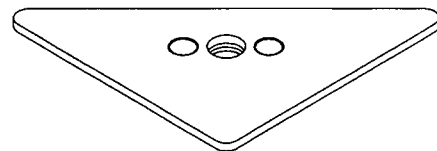
Product Name: AUTOMATIC DOOR OPENER KIT

Part Number (D-Part and 9-Digit)	Drawing/Document & Current Affected Revision	"Y" or "N" Required for Each Part							Reserved ECN Log Number	Instructions Relevant to Each Part
		HOLD SHIPMENT	Red Tag/Quarantine Stock	Advise Customers	Stop Production	Re-Work Stock	IPP Under Review	Product Specifications Under Review		
D3594-043/-044/-3/-4	D3594 Rev. B	N	Y	N	Y	N	Y	N	16-531	See below.
D412-698-023	IIN-D412-698 Rev. E	N	Y	N	Y	N	Y	N	16-531	See below.

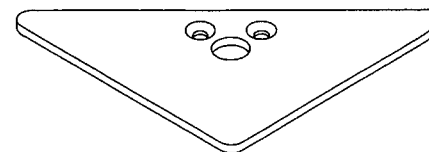
Description of Issue:

Current stock OK to ship to customers other than Bell Helicopter Mirabel.

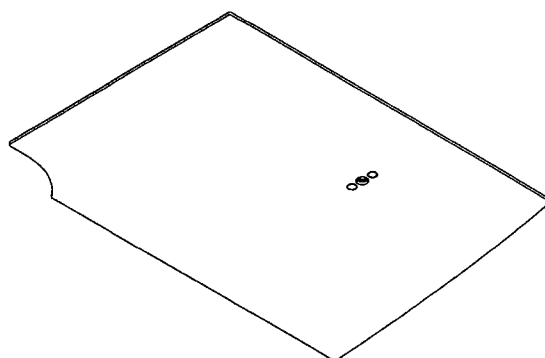
If shipping to Bell Helicopter Mirabel: must ship D412-698-023 with enlarged D3594-043/-044/-3/-4. Eng. To sign off deviations on W/Os.
 Change: addition of material, 0.25", on the inboard and outboard edges as shown to facilitate installation with existing equipment.



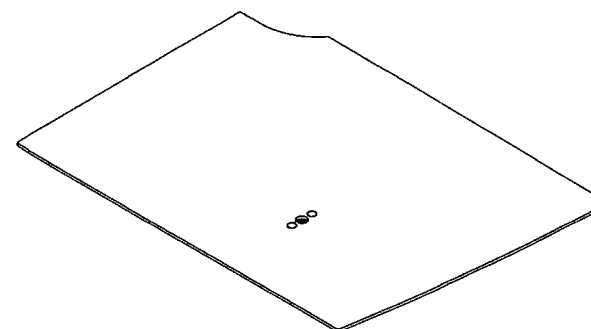
D3594-041 DOOR DOUBLER ASSEMBLY



D3594-5 DOOR DOUBLER



D3594-043 FLOOR DOUBLER ASSEMBLY

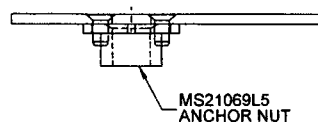
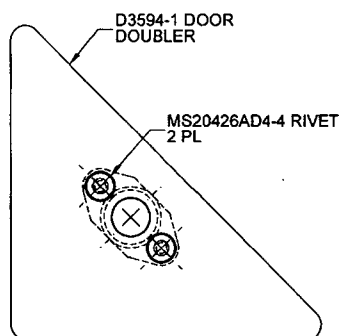


D3594-044 FLOOR DOUBLER ASSEMBLY

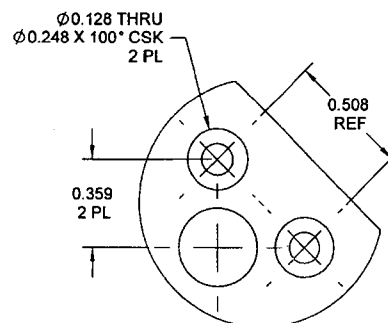
RELEASED
08.08.26

B	REFORMAT TO B SIZE DRAWING. SHEET 2 ADD -5.	AJS	08.05.14
A	NEW ISSUE	MB	07.04.13
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3594	SHEET 1 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	DOUBLER	NTS
DATE	08.05.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

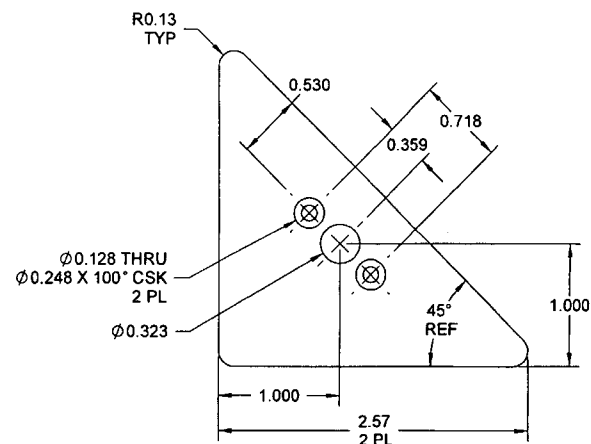
QTY. -041	PART NUMBER	DESCRIPTION
X	D3594-041	DOOR DOUBLER ASSEMBLY
1	D3594-1	DOOR DOUBLER
1	MS21069L5	ANCHOR NUT
2	MS20426AD4-4	RIVET, CSK



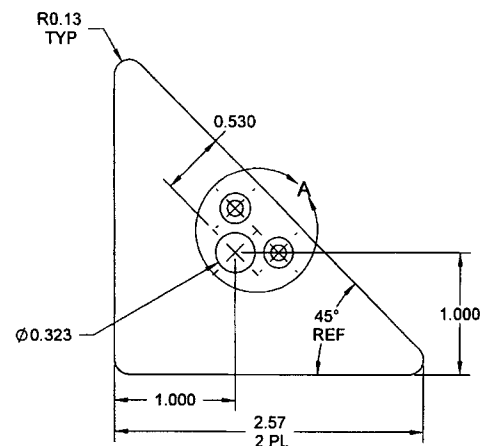
4 D3594-041 DOOR DOUBLER ASSEMBLY



DETAIL A
SCALE 2X



D3594-1 DOOR DOUBLER



5 D3594-5 DOOR DOUBLER B

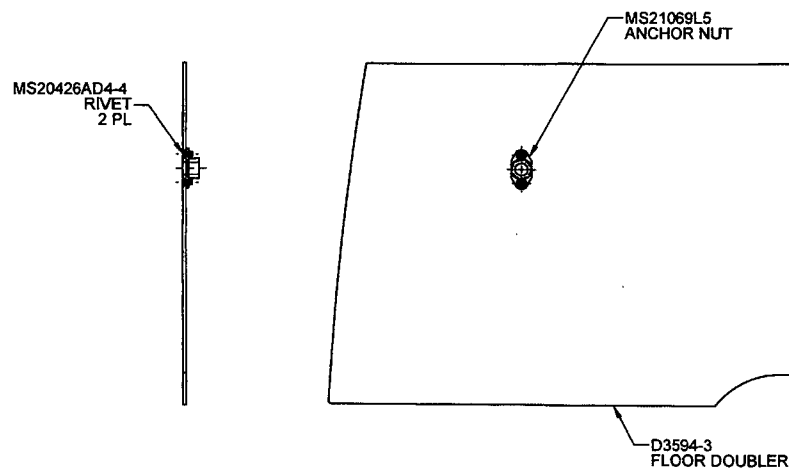
NOTES:

- 1) MATERIAL: -1 & -5
6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK,
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.080)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3594-041" USING FINE POINT PERMANENT INK MARKER
- 5) IDENTIFY WITH DART P/N "D3594-5" USING FINE POINT PERMANENT INK MARKER
- 6) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 7) WEIGHT -041: 0.04 lbs
-5: 0.03 lbs

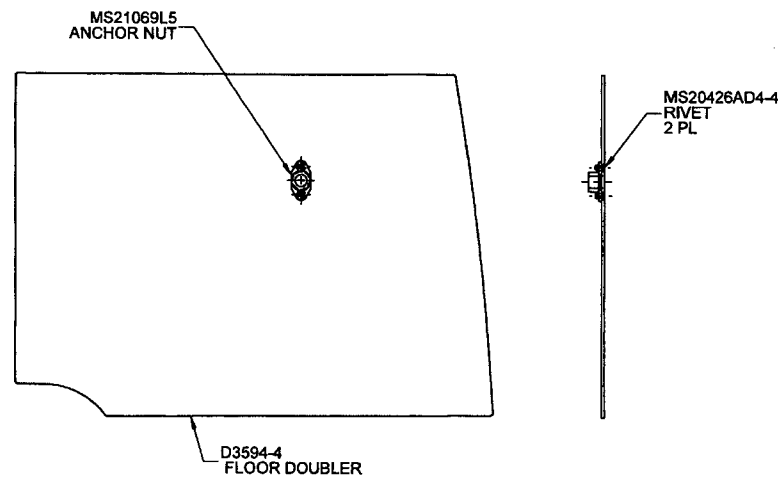
RELEASED
08-06-26-14

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AUS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3594	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		DOUBLER	NTS
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QTY. -043	QTY. -044	PART NUMBER	DESCRIPTION
X		D3594-043	FLOOR DOUBLER ASSEMBLY, LH
	X	D3594-044	FLOOR DOUBLER ASSEMBLY, RH
1		D3594-3	FLOOR DOUBLER, LH
	1	D3594-4	FLOOR DOUBLER, RH
1	1	MS21069L5	ANCHOR NUT
2	2	MS20426AD4-4	RIVET, CSK



D3594-043 FLOOR DOUBLER ASSEMBLY



D3594-044 FLOOR DOUBLER ASSEMBLY

NOTES:

- 1) MATERIAL: -3 & -4
6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.080 THICK,
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.080)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3594-043/-044" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 7) WEIGHT -043 & -044: 0.80 lbs

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3594	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		DOUBLER	NTS
DATE	08.05.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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08.06.14

